IN THE CLAIMS

1-14. (**canceled**)

15. (**currently amended**) A method for isolating DNA from plant tissue comprising:

combining a sample of plant tissue with a mixture of cell wall degrading enzymes isolated from a TW-1 mutant strain of *Trichoderma longibrachiatum*, and

incubating said plant tissue and said mixture of cell wall degrading enzymes**;**

wherein the tissue sample is from a plant selected from the group consisting of Acer campestre, Aesculus hippocastanum, Alium ampeloprassum, Alium fistulosum, Alium porrum, Alnus sp., Anethum graveolens, Anthericum liliago, Arabidopsis thaliana, Aristolochia macrophylla, Asparagus officinalis, Asplenim scolopendrium, Astragalus gummifer, Atropa belladona, Begonia sp., Beta vulgaris, Betula sp., Bletilla striata, Bombax sp., Brassica oleracea, Brunnera macrophylla, Buxus sempervirens, Camellia sinensis, Caprinus sp., Caragana sophoriflora, Cardamine heptaphylla, Carex morrowii, Centaura macrocephala, Cercidiphylum japonicum, Chamaedorea microspadix, Clematis sp., Coffea arabica, Colchicum speciosum, Crocus albiflorus, Cyclamen purpurascens, Cymbidium pendulum, Danae recemosa, Daphne ponica, Dendrobium moschatrum, Dietes bicolor, Dipterracanthus devosianus, Epimedium alpinum, Eranthis hyemalis, Eryngium planum, Euonymus bungeana, Euphorbia leuconeura, Euphorbia rigida, Fragaria sp., Frenaria aurea, Fumaria capreolata, Gadiodus palustris , Geraranium sp., Gloxinia sp., Glycine max, Gossypium sp., Hedere helix, Helleborus dumentorum, Helleborus odoratus, Hibiscus magnifica, Humulus lupulus, Hycintus orientalis, Hypoestes sp., Ilex aquifolium, Impatiens sodenii, Inula ensifolia, Lactuca sativa, Lathyrus vernus, Lilium henryi, Lilium pumilum, Liriope spicata, Lonicera caerulea, Lupinus sp., Lycopersicon esculentum, Mentha piperita, Narcissus pseudonarcissus, Nicotiana tabacum, Nymphea sp., Oreopanax sp., Oryza sativa, Paeonia belladona, Paeonia suffruticosa, Palisota mannii, Papaya sp., Peperomia sp., Petasites albus, Phlomis fructica, Piper sp., Polygonum chinensis, Polygonum multiflorum, Primula pubescens, Primula vulgaris, Psychotria guadeloupensis, Rheum palmatum, Ribes petraeum, Rohdea japonica, Saintpaulia magungensis, Salvia officinalis, Saponaria offcinale, Scilla bifolia, Setaria italica, Siningia sp., Sinningia magnifica, Sison amomum, Skimmia sp., Solanum tuberosum, Sorbus aria, Stachyfarpeta

sp., Tilia sp., Tricantha affilifera, Triticum aestivum (seed), Triticum spelta , Triticum turgidum, Tulipa sp., Uniola latifolia, Urtica dioica, Vanhoutea sp., Veratrum album, Viburnum carlesii, Vitis vinifera, Weigelia floribunda, Weigelia precox, and Zea mais.

16. (original) The method of claim 15, wherein said enzymes of said mixture are produced recombinantly.

17-20. (canceled)

21. (previously presented) The method of claim 15, wherein said enzymes comprise a carbohydrase.

22. (previously presented) The method of claim 15, wherein said mixture comprises a cellulase, a β-glucanase, a mannanase, a xyloglucanase, a pectinase, a glycosidase and a xylanase.

23. (previously presented) The method of claim 15, wherein said mixture comprises at least one of a cellulase, a β-glucanase, a mannanase, a xyloglucanase, a pectinase, a glycosidase and a xylanase.

24. (original) The method of claim 15, wherein said incubation is performed in the presence of a digestion buffer comprising a DNA preserving agent.

25 (original) The method of claim 24, wherein said DNA preserving agent is EDTA.

26. (original) The method of claim 24 wherein said digestion buffer further comprises at least one of a non-ionic detergent and PEG.

27. (original) The method of claim 26, wherein said detergent is Triton-X-100.

28. (original) The method of claim 24, wherein said buffer has a pH of 5.0.

29. (original) The method of claim 15, wherein said incubation is performed at 50°C.

30. (original) The method of claim 15, wherein said combination of said mixture of cell wall degrading enzymes and said sample are agitated at 250 rpm for 1-16 hours.

31. (original) The method of claim 15, further comprising the steps of adding a DNA-binding solid support and binding said DNA to said solid support after said incubation step.

32. (original) The method of claim 15, wherein said method is automated.

33-49. (**canceled**)

50. (previously presented) The method of claim 15, wherein the mixture comprises a cellulase, β-glucanase, a xylanase, a mannanase, a xyloglucanase, a pectinase, a β-glucosidase, a β-xylosidase, an α-L-arabinofuranosidase, and an α-galactosidase; and wherein the mixture has: cellulase activity of 250 to 50,000 U/ml; β-glucanase activity of 240 to 48,000 U/mL; xylanase activity of 40 to 18,000 U/mL; mannanase activity of 5 to 1000 U/mL; xyloglucanase acitivity of 25 to 5000 U/mL; pectinase activity of 15 to 3000 U/mL; β-glucosidase activity of 2.5 to 500 U/mL; β-xylosidase activity of 0.5 to 100 U/mL; α-L-arabinofuranosidase activity of 2.5 to 500 U/mL; and α-galactosidase acivity of 0.5 to 100 U/mL.

51. (previously presented) The method of claim 50, whewherein the mixture has: cellulase activity of 2500 to 5000 U/ml; β-glucanase activity of 2400 to 4800 U/mL; xylanase activity of 400 to 1800 U/mL; mannanase activity of 50 to 100 U/mL; xyloglucanase acitivity of 250 to 500 U/mL; pectinase activity of 150 to 300 U/mL; β-glucosidase activity of 25 to 50 U/mL; β-xylosidase activity of 5 to 10 U/mL; α-L-arabinofuranosidase activity of 25 to 50 U/mL; and α-galactosidase acivity of 5 to 10 U/mL.

52-53. (**canceled**)